

IN THE CLAIMS:

Amendments to the Claims

Please cancel claims 1-3 without prejudice or disclaimer of the subject matter thereof, please amend claims 4-7 and add the new claims as shown below.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (canceled)

4. (currently amended) A rotating electric machine comprising:
a plurality of ventilating passages formed between a stator frame and a stator iron core;
coolers provided in said plurality of ventilating passages;
a fan for boosting a coolant;
a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is cooled by some of said coolers; and
a second ventilating circuit in which the coolant boosted by said fan is cooled by some of said coolers and is allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;
wherein at least one, ~~communicated to a central portion in the axial direction of said stator iron core, ventilating passage~~ of said plurality of ventilating passages ~~which communicates with a central portion of said stator iron core~~ constitutes part of said second ventilating circuit.

5. (currently amended) A rotating electric machine according to claim 4, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in ~~the a~~ radial direction and which are arranged in ~~the an~~ axial direction; and axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.

6. (currently amended) A rotating electric machine in which the inside of said machine is cooled by atmospheric air sucked from outside said machine, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

a fan for boosting a coolant;

a first ventilating circuit in which the atmospheric air boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages; and

a second ventilating circuit in which the atmospheric air boosted by said fan is allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein a cooler is provided at least in one, ~~which constitutes part of said second ventilating circuit and which is communicated to a central portion in the axial direction of said stator iron core, ventilating passage~~ of said plurality of ventilating passages which constitutes part of said second ventilating circuit communicates with a central portion of said stator iron core.

7. (currently amended) A rotating electric machine according to claim 6, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in ~~the-a~~ radial direction and which are arranged in ~~the-an~~ axial direction; and axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.

8. (new) A rotating electric machine comprising:

 a plurality of ventilating passages formed between a stator frame and a stator iron core;

 coolers provided in said plurality of ventilating passages;

 a fan for boosting the coolant;

 a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core to some of said ventilating passages and is cooled by some of said coolers; and

 a second ventilating circuit in which the coolant boosted by said fan and branched from said first ventilating circuit is cooled by some of said coolers, and is allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core;

 wherein at least one ventilating passage of said plurality of ventilating passages constitutes part of said second ventilating circuit and communicates with a central portion of said stator iron core.

9. (new) A rotating electric machine according to claim 8, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.

10. (new) A rotating electric machine in which the inside of said machine is cooled by a coolant enclosed therein, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

coolers provided in said plurality of ventilating passages;

a fan for boosting a coolant;

a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is cooled by some of said coolers; and

a second ventilating circuit in which the coolant boosted by said fan is cooled by some of said coolers and is allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said, ventilating passages;

wherein at least one ventilating passage of said plurality of ventilating passages and communicates with a central portion of said stator iron core.

11. (new) A rotating electric machine according to claim 10, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.

12. (new) A rotating electric machine in which the inside of said machine is cooled by atmospheric air sucked from outside said machine, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

a fan for boosting a coolant;

a first ventilating circuit in which atmospheric air boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages; and

a second ventilating circuit in which atmospheric air boosted by said fan is allowed to flow to said stator iron core in a direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein a cooler is provided at least on a portion of a ventilating passage for communicating an atmospheric air suction hole to one ventilating passage of said plurality of ventilating passages which constitutes part of said second ventilating circuit and which communicates with a central portion of said stator iron core.

13. (new) A rotating electric machine according to claim 12, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.

14. (new) A rotating electric machine comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

coolers provided in said plurality of ventilating passages;

a fan for boosting a coolant;

a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is cooled by some of said coolers; and

a second ventilating circuit in which the coolant boosted by said fan is cooled by some of said coolers and is allowed to flow to said stator iron core in a direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein at least one ventilating passage of said plurality of ventilating passages constitutes part of said second ventilating circuit and communicates with a central portion of said stator iron core; and

said coolers provided in said first ventilating circuit and said coolers in said second ventilating circuit are opposed to each other with a rotating shaft disposed therebetween.

15. (new) A rotating electric machine according to claim 14, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts.